Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Radio telemetry data - Characterizing migration and survival for juvenile Snake River sockeye salmon between the upper Salmon River basin and Lower Granite Dam

1.2. Summary description of the data:

This project estimates survival and characterizes the migration of juvenile sockeye salmon between the upper Salmon River basin in central Idaho and Lower Granite Dam on the Snake River in Washington state using multiple technologies. The approach will use PIT tags and radio telemetry to determine the magnitude, where, and when mortality occurs and characterizes the migration for Snake River sockeye salmon. The outcome of this study will directly contribute to actions that will play a significant part in recovery of ESA-listed Snake River sockeye salmon by examining key uncertainties and filling data gaps.

Tagging, Monitoring sites, and detections by year.

1.3. Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

1.4. Actual or planned temporal coverage of the data:

2011-03-01 to 2015-02-28, 2011-03-01 to 2015

1.5. Actual or planned geographic coverage of the data:

W: -117.4264, E: -117.4263, N: 46.6595, S: 46.6595 Lower Granite Dam forebay north bank (wing wall): RT SIte W: -117.4472, E: -117.4472, N: 46.6794, S: 46.6794 Lower Granite Dam tailrace DS north bank: RT Site

W: -117.1839, E: -117.1839, N: 46.423, S: 46.423

below Clearwater River confluence north bank (Chief Timothy Island): RT Site

W: -113.9071, E: -113.907, N: 45.2538, S: 45.2538 below Lemhi River confluence (Morgan Bar): RT Site

W: -116.3112, E: -116.3112, N: 45.447, S: 45.447

below Little Salmon River confluence (Riggins weigh station): RT Site

W: -114.3464, E: -114.3464, N: 44.2535, S: 44.2535 above East Fork Salmon River confluence: Rt Site

W: -114.9008, E: -114.9008, N: 44.166, S: 44.166

below Little Redfish Lake: RT Site

W: -114.2156, E: -114.2156, N: 45.4034, S: 45.4034

below North Fork Salmon River confluence (Loydd Ranch): RT Site

W: -114.9007, E: -114.9007, N: 44.2409, S: 44.2409

below Lower Stanley: RT Site

W: -116.4116, E: -116.4116, N: 45.9111, S: 45.9111

Rice Creek bridge: RT SIte

W: -114.5344, E: -114.5343, N: 45.3007, S: 45.3007

above the Middle Fork Salmon River confluence (Sayer Ranch): RT Site

W: -113.9788, E: -113.9788, N: 45.3952, S: 45.3952 above North Fork Salmon River confluence: RT SIte

W: -113.9101, E: -113.9101, N: 45.171, S: 45.171

above Lemhi River confluence: RT Site

W: -117.1826, E: -117.1826, N: 46.419, S: 46.419

below Clearwater River confluence south bank (Chief Timothy Island): RT Site

W: -117.0496, E: -117.0496, N: 46.3802, S: 46.3801

above Clearwater River confluence west bank (Swallow's nest): RT SIte

W: -116.7902, E: -116.7902, N: 45.856, S: 45.856 Above the mouth of the Salmon River: RT Site

W: -114.886, E: -114.8859, N: 44.163, S: 44.163

above Red Fish Lake Creek confluence (Buckhorn Bridge): RT Site

W: -116.9353, E: -116.9353, N: 46.14, S: 46.1399 below Grande Ronde River confluence: RT SIte

W: -117.4299, E: -117.4299, N: 46.6591, S: 46.659

Lower Granite Dam forebay mid-channel (RSW): RT SIte

W: -117.452, E: -117.4519, N: 46.6777, S: 46.6776 Lower Granite Dam tailrace DS south bank: RT Site

W: -114.9277, E: -114.9277, N: 44.2234, S: 44.2234

above Valley Creek confluence: RT Site

W: -114.0744, E: -114.0744, N: 44.6766, S: 44.6766 above Pahsimeroi River confluence: RT Site

W: -115.8932, E: -115.8932, N: 45.4596, S: 45.4596

Vinegar Creek boat launch: RT Site

W: -117.4295, E: -117.4295, N: 46.6571, S: 46.657 Lower Granite Dam forebay south bank: RT Site

W: -116.3021, E: -116.3021, N: 45.4143, S: 45.4142 above Little Salmon River confluence (Shorts Bar): RT Site

W: -117.439, E: -117.439, N: 46.6621, S: 46.6621 Lower Granite Dam tailrace US south bank: RT SIte

W: -117.436, E: -117.436, N: 46.6653, S: 46.6653 Lower Granite Dam tailrace US north bank: RT SIte

W: -116.3248, E: -116.3248, N: 45.7661, S: 45.7661

Hammer Creek Recreation Area: RT Site

W: -117.045, E: -117.045, N: 46.3804, S: 46.3804 above Clearwater River confluence east bank (Hells Gate): RT Site

W: -114.3137, E: -114.3137, N: 44.2828, S: 44.2828 below East Fork Salmon River confluence: RT Site

W: -114.0439, E: -114.0439, N: 44.7019, S: 44.7019 below Pahsimeroi River confluence: RT Site

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: Animal Mounted Instrument Platform: Animal based Platform - Fish

Physical Collection / Fishing Gear: Animal and Plant Collection Device

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

Metadata Contact

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

Northwest Fisheries Science Center

2.4. E-mail address:

nmfs.nwfsc.metadata@noaa.gov

2.5. Phone number:

(206) 860-3433

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

Gordon Axel

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

50%

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

The majority of data supplied to the database are observations of tagged fish recorded at the various radio receivers, which the receivers store in hexadecimal format. The files are saved to a computer and placed on a FTP server automatically once per day for downloading into the database.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

During the validation process, the records stored in the preliminary tables are analyzed. We determine the study year, site identifier, antenna identifier, and tag identifier for each record, flagging them as invalid if one or more of these identifiers cannot be determined. In addition, duplicate records (records for which the channel, code, site, antenna, date and time are the same as those of another record) are considered invalid.

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

- **6.1. Does metadata comply with EDMC Data Documentation directive?**Yes
 - 6.1.1. If metadata are non-existent or non-compliant, please explain:
- 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://inport.nmfs.noaa.gov/inport/item/18582

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by

security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

Northwest Fisheries Science Center

7.2.1. If data hosting service is needed, please indicate:

No

7.2.2. URL of data access service, if known:

http://www.ncei.noaa.gov

7.3. Data access methods or services offered:

At this time, contact the Data Manager for information on obtaining access to this data set. In the near future, the NWFSC will strive to provide all data resources as a web service in order to meet the NOAA Data Access Policy Directive (https://nosc.noaa.gov/EDMC/PD.DA.php).

7.4. Approximate delay between data collection and dissemination:

1 days

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

No Delay

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended) NCEI-MD

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Northwest Fisheries Science Center - Seattle, WA

8.3. Approximate delay between data collection and submission to an archive facility: 1 days

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

The Northwest Fisheries Science Center facilitates backup and recovery of all data and IT components which are managed by IT Operations through the capture of static (point-in-time) backup data to physical media. Once data is captured to physical media (every 1-3 days), a duplicate is made and routinely (weekly) transported to an offsite archive facility where it is maintained throughout the data's applicable life-cycle.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.